

10  
S  
~~03~~  
C3  
15

5        using a wiring board as one pole, and an insoluble  
electrode as the other pole; and

15           the metal plating solution is stirred to flow in  
parallel to a surface to be plated of the wiring board.

3. The electrolytic plating method according to claim 1, wherein

4. The electrolytic plating method according to claim 1, wherein:

25           the insoluble electrode is configured by a

the metal plating solution is implemented by a copper plating solution which includes iron ions by 0.1 gram/liter or more, and performs pulse reverse electrolytic plating.

the metal plating solution is a copper plating

the wiring board is a printed-circuit board.

15           arranging a plating bath which accommodates the  
insoluble electrode and the wiring board, and a  
copper dissolved bath which supplies copper ions to said  
plating bath; and

7. An electrolytic plating device for a wiring comprising:

an insoluble electrode which is an electrode as

25

opposed to a wiring board;

a metal plating solution including iron ions by 0.1 gram/liter or more; and

a power source for performing electrolytic  
5 plating by applying a forward/reverse current between  
the wiring board and said insoluble electrode.

8. The electrolytic plating device according  
to claim 7, wherein

10 microvia holes formed on a printed-circuit board  
are filled up with pulse reverse electrolytic plating.

9. The electrolytic plating device according  
to claim 7, further comprising

15 a stirring unit stirring said metal plating  
solution to make said metal plating solution flow in  
parallel to a surface to be plated of the wiring board.

10. The electrolytic plating device according  
20 to claim 9, further comprising:

a plating bath accommodating the insoluble  
electrode and the wiring board; and

a copper dissolved bath supplying copper ions to  
said plating bath, wherein

25 said stirring unit circulates a solution within

the copper dissolved bath and the plating solution within the plating bath.

11. The electrolytic plating device according  
5 to claim 7, wherein:

said insoluble electrode is implemented by a multi-aperture electrode; and

said plating solution is implemented by a copper plating solution.